MALCOLM PIRNIE

Final – Addendum No. 2 Soils Archaeological Work Plan (Area of Potential Effect for the Proposed Rail Spur)

Cornell-Dubilier Electronics Superfund Site,
South Plainfield, NJ

For: U.S. Army Corps of Engineers

USACE Contract No. W912DQ-06-D-0006
Task Order No. 0001

August 2007

Prepared by:
Malcolm Pirnie, Inc.
104 Corporate Park Drive
White Plains, New York 10602

U.S. Army Corps of Engineers
Kansas City District

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE

FINAL ADDENDUM NO. 2
AREA OF POTENTIAL EFFECT FOR THE PROPOSED RAIL SPUR
FINAL SOILS ARCHAEOLOGICAL WORK PLAN
FOR OPERABLE UNIT 2 (OU-2)

By:

Eugene J. Boesch Ph.D., R.P.A.

Malcolm Pirnie, Inc.

White Plains, New York

TABLE OF CONTENTS

FIGURES

1.0 INTRODUCTION

This document is the second addendum to the *Final Soils Archaeological Work Plan* for the 26 acre Cornell-Dubilier Electronics Superfund Site (the Site), located at 333 Hamilton Boulevard, South Plainfield, New Jersey (Figure 1). The second addendum describes the scope of the sub-surface archaeological investigation necessary to adequately evaluate the area of potential effect for a proposed rail spur through the Site, and limited adjoining areas of proposed soil remediation south of Site building number 7, for the presence of possibly significant archaeological resources. The area of potential effect includes the proposed rail spur route and related construction storage and vehicle parking areas. The rail spur will facilitate the removal of contaminated soils and construction debris from the Site during the Project Construction (i.e. Remedial Action) Phase of the Site's remediation.

The original Work Plan was submitted to the United States Army Corps of Engineers (USACE), United States Environmental Protection Agency (USEPA), and the New Jersey State Historic Preservation Office (NJSHPO) in November 2005 (Malcolm Pirnie, Inc. 2005). It subsequently was approved by those agencies in February 2006. That Work Plan, and the subsequent first addendum to it (Malcolm Pirnie, Inc. 2007), address the archaeological testing required to adequately investigate locations south of the existing Site buildings which will be remediated by the removal of contaminated soils. After the original Work Plan was submitted, it was determined that the most effective manner to remove contaminated materials from the Site was by rail. Construction of a rail spur would constitute a direct adverse impact to cultural resources potentially present there. The northern portion of the spur's area of potential effect (south of existing Site building number 7) lies within an area determined to be archaeologically sensitive for the presence of buried remains associated with a drop forge for the Spicer Manufacturing Company (Malcolm Pirnie, Inc. 2006; Figure 2). The southern portion of the spur's area of potential effect extends across an area of contaminated soils containing no structures. The contaminated soils will be remediated.

The location also contains former ground surface layers buried beneath varying amounts of fill (Malcolm Pirnie, Inc. 2007; Figure 2). The buried ground surface layers potentially contain evidence of Native American activity, which require archaeological testing prior to their removal during remedial activities (Malcolm Pirnie, Inc. 2006, 2007). The original work plan and its first addendum detail the scope of the archaeological testing within the filled area (Malcolm Pirnie, Inc. 2005, 2007). That work was to be completed during the Remedial Action phase of the Superfund project. However, if the rail spur is to be constructed before that phase, archaeological testing of its proposed route through the filled area will need to be completed earlier.

Implementation of the second addendum to the Work Plan will fulfill a recommendation included in the *Final Historic Places Significance Evaluation Operable Unit 2* report (Malcolm Pirnie, Inc. 2006) for the Cornell Dubilier Electronics Superfund Site and contribute to completing the archaeological testing and evaluation of the property in compliance with the National Historic Preservation Act.

This Work Plan Addendum Number 2 outlines the technical efforts (i.e., Phase Ib-level sub-surface investigation) necessary for determining whether potentially significant archaeological resources are located within the area of potential effect for the proposed rail spur and area of proposed contaminated soil remediation extending south of building number 7 (Figure 2). The goals of the testing are to determine whether: 1) Native Historic period and/or Native American period archaeological sites that are potentially eligible for listing on the New Jersey State and National Registers of Historic Places, are located south of building number 7 and along the proposed rail spur route; 2) make recommendations as to the need for possible additional investigations there; and 3) provide for planned and coordinated actions with respect to any warranted evaluation and mitigation of potential impacts to resources identified resulting from proposed USACE and USEPA actions and on-going activities.

All work is to be conducted in accordance with the requirements of Sections 106 and 110 of the National Historic Preservation Act of 1966 and its implementing regulations (i.e. 36 CFR Part 800), Executive Order 11593 and the guidelines and

standards currently adopted by NJSHPO. Arrangements will be made for Mr. John Vetter, the USEPA archaeologist, to visit the Site during the sub-surface testing.

All work described in this Work Plan Addendum Number 2 will be undertaken by, or under the direct supervision of, Eugene J. Boesch, Ph.D., R.P.A., Senior Archaeologist for Malcolm Pirnie, Inc., White Plains, New York.

2.0 SUB-SURFACE INVESTIGATION: NORTHERN PORTION OF THE RAIL SPUR'S AREA OF POTENTIAL EFFECT AND OTHER LOCATIONS SOUTH OF BUILDING 7

Archaeological testing in this location will consist of the excavation by mechanized equipment of an appropriate number of trenches to determine whether structural remains, and deposits associated with activities formerly occurring at those structures, are present. Trenches will vary in size based upon the results of the fieldwork; depth is not anticipated to be more than approximately three feet. Encountered structural remains will be exposed only to the extent that their function can be determined. If warranted, any deposits encountered by the excavations would be manually tested using standard archaeological techniques if site health and safety concerns can be met. All encountered remains and deposits would be investigated and recorded only to the extent that their significance can be determined. The objectives of the manual testing are to investigate the stratigraphy present in the area and to recover a sample of any cultural material that may be associated with those strata in order to determine whether evidence of Historic period and/or Native American period activity are present. All manually excavated test units will typically cover approximately two square feet of ground surface and will extend to either: 1) depths below which naturally occurring, culturally sterile sub-soil is encountered; 2) the extent achievable using the excavation techniques employed; or 3) the maximum depth of soil remediation. Test units will be excavated stratigraphically. It is estimated that between three and six test units will be completed as part of the investigation. The location of each trench and test unit conducted will be identified on an appropriate map of the Site. At least one wall profile of each trench and test unit will be appropriately recorded.

All soil removed from the test units will be screened on-site through ¼ inch mesh (hardware cloth) to detect the presence of artifacts. Any artifacts encountered will be segregated and retained and the remaining soils will be returned to the tested area.

Separation of artifacts from different stratigraphic contexts will be maintained to the extent possible with the procedures used. Recovered artifacts will be washed and tabulated in a work area established on-site as part of the analysis for the archaeological investigation. They will be stored on-site until a determination is made by the NJSHPO as to the potential significance of the deposit from which they were recovered. If the artifacts are determined to derive from potentially significant deposits warranting additional evaluation, they will be appropriately labeled and stored on-site. A determination will be made by the USEPA and other appropriate parties as to the final deposition of those artifacts. If the artifacts are determined to derive from deposits that are not potentially significant and do not warrant additional evaluation, they will not be labeled and subsequently disposed of in an appropriate manner. Following processing of the artifacts, the stratigraphy encountered in each test unit will be analyzed in conjunction with the artifacts recovered in order to interpret the investigation's results. All field activities will be performed in accordance with the *Final Soils Site Safety and Health Plan* (July 2006).

A report on the investigation in the northern portion of the rail spur's area of potential effect will be prepared as described in Section 4 of this addendum and submitted to the USACE, USEPA, and NJSHPO for their review.

3.0 SUB-SURFACE INVESTIGATION: SOUTHERN PORTION OF THE RAIL SPUR'S AREA OF POTENTIAL EFFECT

Archaeological investigation within this portion of the rail spur's area of potential effect will be completed in accordance with Task 3 (Sub-surface Investigation: Mechanized Deep Testing) as set forth in the original archaeological work plan for the Cornell-Dubilier Electronics Superfund Site (Malcolm Pirnie, Inc. 2005). This effort will partially fulfill Task 3 of that work plan. The work described in this Section will be completed prior to construction of the proposed rail spur. Prior archaeological borings in the vicinity of the spur's area of potential effect indicated that fill deposits are present in the area to depths greater than that reachable by shovel testing (Malcolm Pirnie, Inc. 2007). Accordingly, approximately seven small, mechanized backhoe trenches will be excavated within the filled area in the southern part of the spur's area of potential effect. The objectives of the mechanized deep testing are to determine whether evidence of Native American and/or Historic period activity is deeply buried in or beneath the fill. Each trench will extend to either: 1) depths below which naturally occurring, culturally sterile sub-soil is encountered; 2) the extent achievable using the techniques employed; or 3) the maximum depth of soil remediation. The location of each test trench conducted will be identified on an appropriate map of the Site. At least one wall profile of each trench will be appropriately recorded. While the depth of each trench will be determined by the extent of fill encountered, it is not anticipated to be more than approximately four feet.

Excavated soil contexts identified in the trenches that may potentially contain Native American or Historic period artifacts will be sampled by screening to the extent practicable to determine whether Native American and/or Historic period artifacts are present. Any artifacts recovered will be washed, tabulated, and placed in labeled containers according to provenience in a work area established on-site as part of the analysis for the archaeological investigation. Recovered artifacts will not be removed from the Site. Following processing of any artifacts recovered, the stratigraphy

encountered in each trench will be analyzed in conjunction with the artifacts and other excavation data recovered in order to interpret the survey results.

Additional investigation of the area of extensive fill at the Site that is located outside of the rail spur's area of potential effect will be completed at a future date during the Remedial Action efforts for the project. These efforts will occur as Phase 3 on the Remedial Design schedule. Such future testing would complete Task 3 as described in the original work plan (Malcolm Pirnie, 2005).

4.0 REPORT PREPARATION

A report will be produced: 1) detailing the methodology employed to conduct the investigation in the northern and southern portions of the area of potential effect for the proposed rail spur and, if necessary, surrounding locales; 2) presenting the results of the work; 3) providing conclusions on the presence or absence of possibly significant cultural resources there; and 4) presenting recommendations for any warranted additional investigations. If no additional investigations of the tested areas are warranted, such conclusions will be clearly stated in the report. Appropriate figures and appendices illustrating points made in the text will be included in the investigation report. NJSHPO archaeological site inventory forms will be completed for any archaeological site identified by the investigation.

5.0 OTHER TASKS AND DELIVERABLES

Other Tasks and Deliverables described in the *Final Soils Archaeological Work Plan,* and Addendum 1 to that plan, will be completed according to the project remediation schedule.

6.0 REFERENCES CITED

Malcolm Pirnie, Inc., Eugene J. Boesch Ph.D., R.P.A. Principal Investigator.

2005 *Final Soils Archaeological Work Plan. Cornell-Dubilier Electronics Superfund Site, South Plainfield, New Jersey.* USACOE Contract Number DACW41-02-D-0003, Task Order Number 0034. Prepared for the United States Army Corps of Engineers.

2005 *Final Soils Site Safety and Health Plan. Cornell-Dubilier Electronics Superfund Site, South Plainfield, New Jersey.* USACOE Contract Number DACW41-02-D-0003, Task Order Number 0034. Prepared for the United States Army Corps of Engineers.

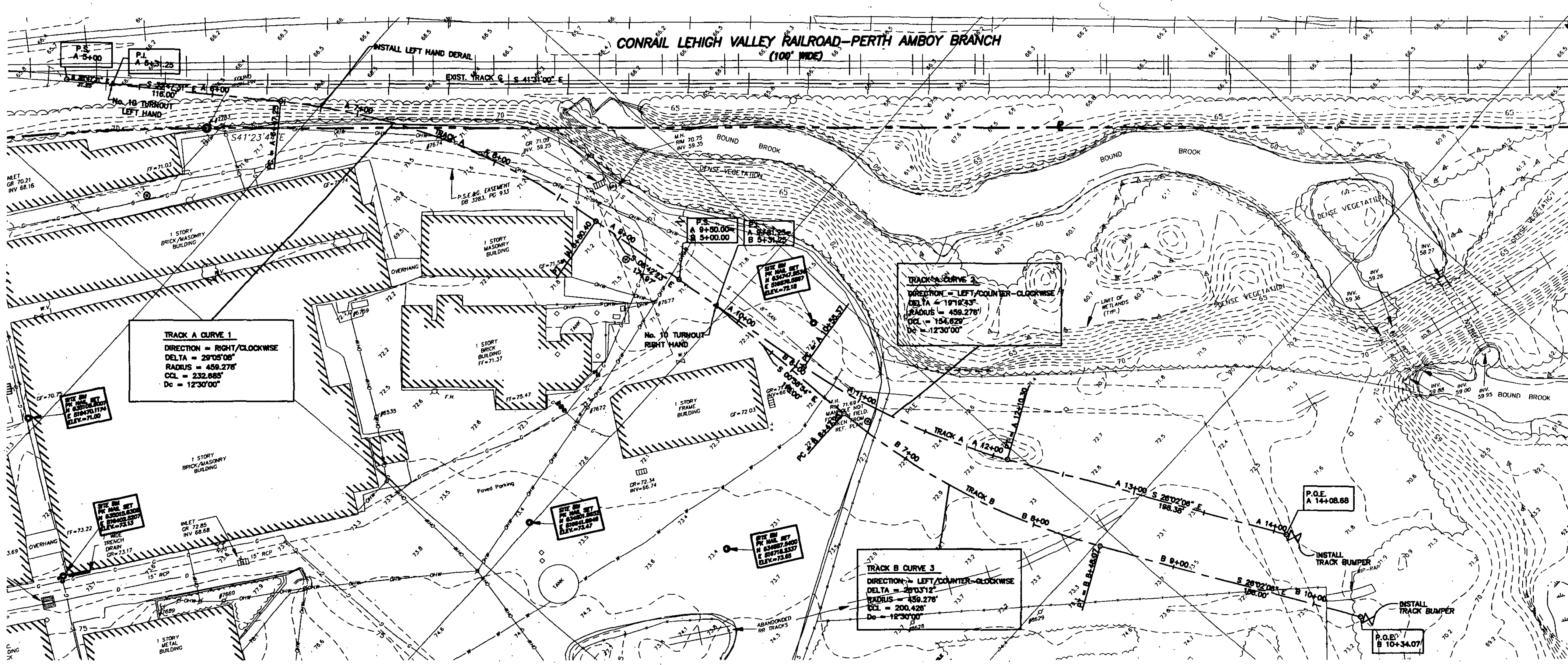
2006 *Final Historic Places Significance Evaluation Operable Unit 2. Cornell-Dubilier Electronics Superfund Site, South Plainfield, New Jersey.* USACOE Contract Number W912DQ-06-D-0006, Task Order Number 0001 Prepared for the United States Army Corps of Engineers.
2005

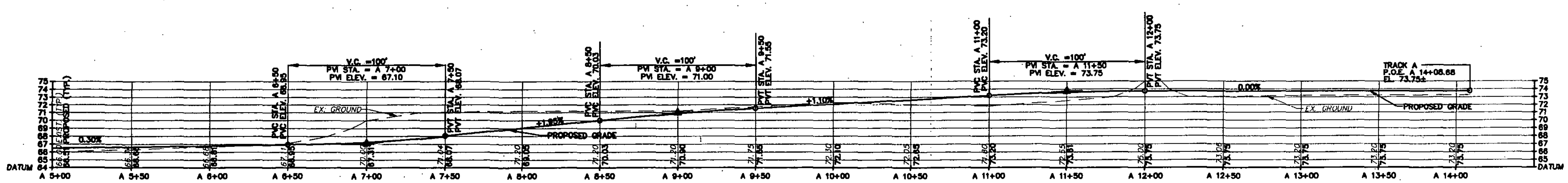
2007 *Addendum Number 1, Soils Archaeological Work Plan. Cornell-Dubilier Electronics Superfund Site, South Plainfield, New Jersey.* USACOE Contract Number DACW41-02-D-0003, Task Order Number 0034. Prepared for the United States Army Corps of Engineers.

FIGURES

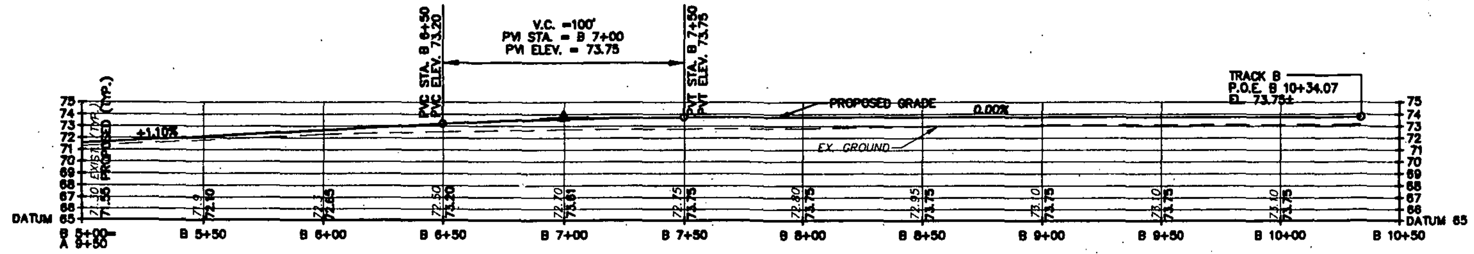
SOURCE: U.S.G.S. TOPOGRAPHIC MAP,
7.5 MINUTE SERIES, PLAINFIELD, NEW JERSEY
QUADRANGLE, 1955, PHOTOREVISED 1981

MALCOLM PIRNIE	U.S. ARMY CORPS OF ENGINEERS CORNELL-DUBILIER SUPERFUND SITE OU-2 SOILS SOUTH PLAINFIELD, NEW JERSEY CONTRACT NO. W912DQ-06-D-0006 TO 0001	SITE LOCATION MAP SCALE AS NOTED	MALCOLM PIRNIE, INC. AUGUST 2007 FIGURE 1





STATION
TRACK A (ALTERNATE NO. 1)



TRACK B (ALTERNATE NO. 1)

NOTES:

1. EXISTING 1 STORY BUILDINGS DEPICTED ON DRAWINGS ARE SCHEDULED FOR DEMOLITION BY USACE PRIOR TO CONSTRUCTION OF THIS RAIL SPUR.
2. REFERENCE: TOPO SURVEY BY PENNONI ASSOCIATES DATES: 5/01/06, 5/08/06, 5/16/06, AND 8/08/06 HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NGVD 29
3. 35% REVIEW SET NOT FOR CONSTRUCTION

35% DESIGN

PROGRESS PRINT 5/30/07 NOT FOR CONSTRUCTION

SCALE: 1" = 40'
Verify Scale
bar is one inch on original drawing.

U.S. Army Corps of Engineers KANSAS CITY DISTRICT

Symbol	Description	Date	Approved
	Revisions		

DAVE C. DUCHSCHERER PROFESSIONAL ENGINEER

Designed by: AEG	Date: 3/07	Approved by: CMG	Date: 3/07
Drawn by: OLB	Date: 3/07	File Name:	
Reviewed by: CMG	Date: 3/07		

U.S. ARMY ENGINEER DIVISION
CORPS OF ENGINEERS
KANSAS CITY DISTRICT
KANSAS CITY, MISSOURI

CORNELL-DUBILIER ELECTRONICS
SUPERFUND SITE OU-2 ON-SITE RAIL SPUR
SOUTH PLAINFIELD, NEW JERSEY

PLAN & PROFILE

P-1

Sheet of